

## **FEDERAL AND STATE ANTIDEGRADATION RULES, ANNOTATED**

### **Background for WQSAC Lake Nutrient Criteria Working Group meeting 4/14/2008**

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**This is the full text of federal and state rules applicable to New Hampshire's antidegradation rule. Parts that are particularly relevant are in large font, bolded.**

#### **FEDERAL (40 CFR 131.12)**

Sec. 131.12 Antidegradation policy.

(a) The State shall develop and adopt a statewide antidegradation policy and identify the methods for implementing such policy pursuant to this subpart. The antidegradation policy and implementation methods shall, at a minimum, be consistent with the following:

(1) Existing instream water uses and the level of water quality necessary to protect the existing uses shall be maintained and protected. **[Tier I]**

(2) Where the quality of the waters exceed levels necessary to support propagation of fish, shellfish, and wildlife and recreation in and on the water, that quality shall be maintained and protected unless the State finds, after full satisfaction of the intergovernmental coordination and public participation provisions of the State's continuing planning process, that allowing lower water quality is necessary to accommodate important economic or social development in the area in which the waters are located. In allowing such degradation or lower water quality, the State shall assure water quality adequate to protect existing uses fully. Further, the State shall assure that there shall be achieved the highest statutory and regulatory requirements for all new and existing point sources and all cost-effective and reasonable best management practices for nonpoint source control. **[Tier II]**

(3) Where high quality waters constitute an outstanding National resource, such as waters of National and State parks and wildlife refuges and waters of exceptional recreational or ecological significance, that water quality shall be maintained and protected. **[Tier III]**

(4) In those cases where potential water quality impairment associated with a thermal discharge is involved, the antidegradation policy and implementing method shall be consistent with section 316 of the Act.

**STATE (Env-Wq 1705 and 1708, in the version now in rulemaking)**

Env-Wq 1705.01 Assimilative Capacity. Except for combined sewer overflows where 99 percent of the assimilative capacity shall be used to determine compliance, **not less than 10 percent of the assimilative capacity of the surface water shall be held in reserve** to provide for future needs.

## PART Env-Wq 1708 ANTIDegradation

Env-Wq 1708.01 Purpose. The purpose of these antidegradation provisions is to ensure that the following provisions of 40 CFR 131.12 are met:

- (a) Existing uses and the level of water quality necessary to protect the existing uses shall be maintained and protected; **[Tier I]**
- (b) For **significant changes** in water quality, where the quality of the surface waters exceeds levels necessary to support propagation of fish, shellfish, and wildlife, and recreation in and on the water, that quality shall be maintained and protected unless the department finds, after full satisfaction of the intergovernmental coordination and public participation provisions that, in accordance with Env-Wq 1708.10, allowing lower water quality is necessary to accommodate important economic or social development in the area in which the surface waters are located. In allowing such degradation or lower water quality, the department shall assure water quality adequate to fully protect existing uses. Further, the department shall assure that the highest statutory and regulatory requirements shall be achieved for all new and existing point sources and that all cost effective and reasonable best management practices for nonpoint source control shall be implemented; **[Tier II]**
- (c) For **insignificant changes** in water quality, where the quality of the surface waters exceeds levels necessary to support propagation of fish, shellfish, and wildlife, and recreation in and on the water, that quality shall be maintained and protected. In allowing such degradation or lower water quality, the department shall assure water quality adequate to protect existing uses fully. Further, the department shall assure that the highest statutory and regulatory requirements shall be achieved for all new and existing point sources and that all cost effective and reasonable best management practices for nonpoint source control shall be implemented; **[Tier II]**
- (d) Where high quality surface waters constitute an outstanding resource waters (ORW), that water quality shall be maintained and protected; and **[Tier III]**
- (e) In those cases where a potential water quality impairment is associated with a thermal discharge, the antidegradation provisions shall ensure that the requirements of section 316 of the Clean Water Act are met.-

Env-Wq 1708.02 Applicability. Antidegradation shall apply to:

- (a) Any proposed new or increased activity, including point source and nonpoint source discharges of pollutants, that would lower water quality or affect the existing or designated uses;
- (b) Any proposed increase in loadings to a waterbody when the proposal is associated with existing activities;

- (c) Any increase in flow alteration over an existing alteration; and
- (d) Any hydrologic modifications, such as dam construction and water withdrawals.

Env-Wq 1708.03 Submittal of Data. The applicant shall provide all information necessary to:

- (a) Identify all existing uses, including:
  - (1) Freshwater, estuarine, and marine aquatic life present in the affected surface waters;
  - (2) Other wildlife that use or are dependent on the affected surface waters;
  - (3) Presence of water quality and physical habitat that support, or would support, aquatic life or other animal or plant life;
  - (4) Presence of indigenous species and communities;
  - (5) Presence of a specialized use of the waterbody, such as a spawning area or as a habitat for a federally or state listed threatened or endangered species;
  - (6) Use of the surface waters for recreation in or on the water, such as fishing, swimming, and boating, or use of the surface waters for commercial activity; and
  - (7) Whether or not current conditions or uses of the surface waters conflict with achieving and maintaining goal uses of the CWA at Section 101(a)(2) and the primary CWA objective to restore and maintain the chemical, physical, and biological integrity of the nation's surface waters;
- (b) Determine the level of water quality necessary to maintain and protect those uses;
- (c) Evaluate the potential impacts on existing uses due to the proposed discharge or activity by itself, and in combination with other discharges or activities presently occurring;
- (d) Ensure that existing uses and the level of water quality necessary to protect those uses shall be maintained and protected.
- (e) Evaluate the magnitude, duration, and upstream and downstream extent of any lowering of high quality water due to the proposed discharge or activity by itself, and in combination with other discharges or activities presently occurring;
- (f) Evaluate other factors as necessary to determine whether the proposed activity would cause significant or insignificant degradation, in accordance with Env-Wq 1708.09;
- (g) If the discharge or activity is determined by the department to be significant, in accordance with Env-Wq 1708.08 and Env-Wq 1708.09, determine if a proposed lowering of water quality is necessary to achieve important economic or social development in accordance with Env-Wq 1708.10; and
- (h) Ensure that all water quality criteria applicable to the waterbody in question shall not be violated.

Env-Wq 1708.04 Protection of Existing Uses.

- (a) This section shall apply to all surface waters.
- (b) A proposed discharge or activity shall not eliminate any existing uses or the water quality needed to maintain and protect those uses.
- (c) Using the information provided at Env-Wq 1708.03, the department shall determine the existing uses for the waters in question.

Env-Wq 1708.05 Protection of Water Quality in ORW. [Tier III]

**(a) Surface waters of national forests and surface waters designated as natural under RSA 483:7-a, I, shall be considered outstanding resource waters (ORW).**

**(b) Water quality shall be maintained and protected in surface waters that constitute ORW**, except that some limited point and nonpoint source discharges may be allowed providing that they are of limited activity which results in no more than temporary and short-term changes in water quality. “Temporary and short term” means that degradation is limited to the shortest possible time. Such activities shall not permanently degrade water quality or result at any time in water quality lower than that necessary to protect the existing and designated uses in the ORW. Such temporary and short term degradation shall only be allowed after all practical means of minimizing such degradation are implemented.

Env-Wq 1708.06 Protection of Class A Waters. [Redundant Section]

- (a) In accordance with RSA 485-A:8, I, discharges of sewage or waste to Class A waters shall be prohibited.
- (b) Proposed new or increased activities that the department determines do not involve the discharge of sewage or waste shall be reviewed in accordance with Env-Wq 1708.01 through Env-Wq 1708.12.

Env-Wq 1708.07 Protection of Water Quality in High Quality Waters.

**(a) Subject to (b), below, high quality waters shall be maintained and protected, except that insignificant changes in water quality, as determined by the department in accordance with Env-Wq 1708.09, shall be allowed.**

(b) Degradation of significant increments of water quality, as determined in accordance with Env-Wq 1708.09, in high quality waters shall be allowed only if it can be demonstrated to the department, in accordance with Env-Wq 1708.10, that allowing the water quality degradation is necessary to accommodate important economic or social development in the area in which the receiving waters are located.

(c) Economic/social benefits demonstration and alternatives analysis shall not be required for authorization of an insignificant lowering of water quality; However, in allowing a lowering of water quality, significant or insignificant, all reasonable measures to minimize degradation shall be used.

(d) If the waterbody is Class A Water, the requirements of Env-Wq 1708.06 shall also apply.

Env-Wq 1708.08 Assessing Waterbodies.

(a) The applicant shall characterize the existing water quality and determine if there is remaining assimilative capacity for each parameter in question.

(b) Existing water quality shall be calculated in accordance with Env-Wq 1705.02. Existing water quality shall be established based on point sources discharging at their allowed loadings and the highest loadings anticipated from nonpoint sources.

(c) Where flow alteration is involved, establishment of existing conditions shall be based on the existing maximum allowed water withdrawals or impoundment, diversion, or fluctuation of stream flow, as appropriate.

(d) Remaining assimilative capacity shall be evaluated by comparing existing water quality, as specified in (b) and (c), above, to the state's water quality criteria.

(e) If the type and frequency of the proposed discharge or activity causes the waterbody to be impacted at flows other than those listed in Env-Wq 1705.02, the department shall require the applicant to evaluate the impact of the proposed discharge at those other flows.

(f) Subject to (h), below, if the department determines, based on the information submitted, that there is no remaining assimilative capacity, no further degradation with regard to that parameter shall be allowed.

(g) Subject to (h), below, if the department determines, based on the information submitted, that there is some remaining assimilative capacity, then the department shall proceed in accord with Env-Wq 1708.09.

(h) The above determinations shall take into account Env-Wq 1705.01 which requires the department to reserve no less than 10% of a surface water's assimilative capacity.

Env-Wq 1708.09 Significant or Insignificant Determination.

(a) Any discharge or activity that is projected to use 20% or more of the remaining assimilative capacity for a water quality parameter, in terms of either concentration or mass of pollutants, or volume or flow rate for water quantity, shall be considered a significant lowering of water quality. The department shall not approve such a discharge or activity unless the applicant demonstrates that the proposed lowering of water quality is necessary to achieve important economic or social development, in accordance with Env-Wq 1708.10, in the area where the waterbody is located.

(b) Subject to (d), below, those activities that cause an insignificant lowering of water quality shall not be required to demonstrate that they are necessary to provide important economic or social development.

(c) Activities under (b), above shall include, but not be limited to:

- (1) Short term or intermittent discharges such as hydrostatic testing of pipelines, fire pump test water, and uncontaminated stormwater discharges or site clean-up activities;
- (2) Permanent discharges such as uncontaminated noncontact or uncontaminated geothermal cooling water, uncontaminated groundwater seepage, or unchlorinated or dechlorinated swimming pool water;
- (3) Facilities whose nonpoint source runoff is controlled through the use of best management practices; and
- (4) Any discharge or activity that is projected to use less than 20% of the remaining assimilative capacity for a water quality parameter, in terms of either concentration or mass for pollutants.

(d) If the department determines that, because of the following factors, the effect of a discharge results in a greater impact to the water quality than that normally found in insignificant discharges, it shall determine that the proposed activity or discharge is significant, regardless of the proposed consumption of the remaining assimilative capacity, and require the applicant to demonstrate, in accordance with Env-Wq 1708.10, that a lowering of water quality is necessary to achieve an important economic or social development:

- (1) The magnitude, duration, and spatial extent of the proposed change in water quality;
- (2) The cumulative lowering of water quality over time resulting from the proposed activity in combination with previously approved activities;
- (3) The possible additive or synergistic effects of the activity in combination with existing activities;
- (4) The magnitude of the mass load independent of the total assimilative capacity or change in receiving water pollutant concentration;
- (5) The toxic or bioaccumulative characteristics of the pollutant(s) in question;
- (6) The potential to stress sensitive biological resources such as indigenous species, rare species, and threatened or endangered species and their habitat;
- (7) The potential to stress sensitive recreational uses or water supply uses;

or

(8) The quality and value of the resource.

Env-Wq 1708.10 Demonstration of Economic or Social Development.

(a) Unless the department determines from documentation provided by the applicant, or other available information, that a proposed new or increased discharge or other activity would result in an insignificant impact to the existing water quality of a high quality waterbody, the department shall require that the applicant provide documentation, in accordance with the procedures delineated in “Interim Economic Guidance for Water Quality Standards” EPA- 823-B-95-002, dated March 1995, that the:

(1) Proposed project or activity will provide an important economic or social development in the area where the waterbody is located; and

(2) Lowering of water quality is necessary to accommodate the development.

(b) Where the department finds, based on the information provided in Env-Wq 1708.10(a) that a proposed project would provide an important economic or social development, it shall require that an alternatives analysis be developed, in accordance with Env-Wq 1708.10(c), to determine if it is possible to realize those benefits either without lowering water quality or with a reduced degree of degradation.

(c) To determine if the lowering of water quality is necessary to accommodate an important economic or social benefit, the department shall require the applicant to evaluate the following alternatives and submit technically and scientifically valid information describing the benefits and impacts of each alternative on water quality and the degree to which the economic or social benefits could be realized if the alternatives were implemented:

(1) Alternative methods of production or operation;

(2) Improved process controls;

(3) Water conservation practices;

(4) Wastewater minimization technologies;

(5) Non-discharging alternatives;

(6) Improved wastewater treatment facility operation;

(7) Alternative methods of treatment, including advanced treatment beyond applicable technology requirements of the Clean Water Act; and

(8) Alternative sites, and associated water quality impacts at those sites.

(d) The department shall make a preliminary determination, based on the information provided in Env-Wq 1708.10(a) and (c), to approve or deny the applicant's request.

(e) If the department approves the applicant's request, the department shall provide the opportunity for public comment on its preliminary decision in accordance with Env-Wq 1708.11.

Env-Wq 1708.11 Public Participation and Intergovernmental Coordination.

(a) The department shall provide the opportunity for public comment on preliminary decisions to allow any lowering of water quality.

(b) The department shall issue a written notice to the public, the municipality in which the activity is located or proposed to be located and all potentially affected municipalities. The notice shall invite written comments to be submitted to the department and shall provide an opportunity to request a public hearing. For activities related to state surface water discharge permits, this public notice shall be a part of the normal public participation procedures associated with the issuance of the permit.

(c) The notice shall be published in a newspaper of general circulation in the municipality where the proposed activity will occur and shall include the following information:

- (1) A description of the proposed activity;
- (2) A description of the surface waters involved and their use classification;
- (3) A statement of the department's antidegradation provisions;
- (4) A determination that existing uses and necessary water quality will be maintained and protected;
- (5) A summary of the expected impacts on high quality waters;
- (6) A determination that where a lowering of water quality is allowed, all applicable water quality criteria shall be met, designated uses protected, and any higher water quality achievable by the most stringent applicable technology-based requirements shall be maintained;
- (7) A discussion of any other information that is relevant to how the activity complies or does not comply with these provisions;
- (8) The summary of the important economic or social development, if applicable;
- (9) A summary of the alternatives analysis and a finding that the lowering of water quality is necessary; and
- (10) The name, address, and telephone number of the person in the department where all written comments or requests for public hearing can be sent.

(d) To fulfill intergovernmental coordination, the department shall submit a copy of the public notice to the following agencies and request comments:

- (1) NH department of resources and economic development;
- (2) NH department of health and human services;
- (3) NH fish and game department;
- (4) NH office of energy and planning;



- (5) US EPA Region I;
- (6) US Army Corps of Engineers;
- (7) US Fish and Wildlife Service;
- (8) National Marine Fisheries Service;
- (9) Local river advisory committees, if applicable;
- (10) National Park Service; and
- (11) Natural Resources Conservation Service.

(e) The department shall respond to all comments received as a result of public participation and intergovernmental coordination. If a request to hold a public hearing is received, the department shall hold a public hearing; in accordance with the provisions of Env-C 200 that apply to non-adjudicative proceedings.

(f) Following this public participation process, the department shall, based on any further information submitted during the public hearing, make a final decision to allow or deny the proposed impact on water quality. If the application is denied, the applicant may revise the submittal to decrease or eliminate the projected impact to high quality waters; and resubmit the application for consideration under the full review process.

Env-Wq 1708.12 Transfer of Water to Public Water Supplies. The transfer of waters from rivers, streams, lakes, or ponds to waters used as a public water supply shall be subject to the following conditions:

- (a) Both the source water in the area of the withdrawal and the receiving water shall be acceptable for water supply uses after treatment;
- (b) The chemical and physical water quality parameters of the source water shall be at least equal to the water quality of the receiving water;
- (c) The biological characteristics of the source water shall be compatible with those of the receiving water and shall not contain species of aquatic life that would adversely affect the species of aquatic life in the receiving water; and
- (d) The transfer and withdrawal shall comply with the antidegradation provisions of this part.

# CONCEPTUAL DIAGRAM FOR TIER 1 AND TIER 2 WATERS ESTIMATION

(not to scale)

